



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,197	03/15/2001	Terence G Hodgkinson	36-1437	6234
23117	7590	03/20/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			PHAN, TRI H	
			ART UNIT	PAPER NUMBER
			2661	
DATE MAILED: 03/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

88

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/787,197		HODGKINSON ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tri H. Phan		2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,11,12,15,16 and 19 is/are rejected.
- 7) ☒ Claim(s) 3,4,9,10,17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Election/Restrictions*

1. This Office Action is in response to applicant's Response filed on November 14<sup>th</sup>, 2005, respectively. Claims 1-19 are pending in the application. Claims 1-12 and 15-19 were elected to be prosecuted on the merits; thus, non-elected claims 13-14 are withdrawn from consideration.
2. Applicant's election with traverse of invention I (claims 1-12 and 15-19) in the reply filed on November 14<sup>th</sup>, 2005 is acknowledged. The traversal is on the ground(s) that "all of the claims include the feature of a server computer which has two output buffers used in sending a stream of packets. Packets are sent using the first buffer until the server computer receives a signal telling it to use the second buffer for the remaining packets". This is not found persuasive because, in the instant case, the invention I requires the use of the two buffer elements in the network node(s) to prioritize data forwarding over the communication network; whereas, the invention in group II does not employ the use of these buffer elements. Furthermore, invention in group II is <sup>geared</sup> ~~grant~~ toward claiming the server end without any need for a specific structure of the network node.

The requirement is still deemed proper and is therefore made FINAL.

### *Claim Objections*

3. Claims 1, 3-5, 7, 9-11, 15 and 17-19 are objected to because of the following informalities:

In claim 1, line 7, the word "the" right in front of the term "output bandwidth" should be corrected to -- an -- for clarity.

In claim 3, line 3, the word "the" right in front of the term "level of data stored" should be corrected to -- a -- for clarity.

Same objection's reason for claim 4, line 3, the word "the" in front of the term "level of data stored" should be corrected to -- a -- for clarity.

Also in claim 4, line 4, the word "the" in front of the term "first threshold value" should be corrected to -- a -- for clarity.

In claim 5, line 3, the word "the" in front of the term "communications route" should be corrected to -- a -- for clarity.

Also in claim 5, line 5, the word "the" in front of the term "selection" should be corrected to -- a -- for clarity.

In claim 7, line 6, the word "the" in front of the term "output bandwidth" should be corrected to -- an -- for clarity.

In claim 9, line 3, the word "the" in front of the term "level of data stored" should be corrected to -- a -- for clarity.

Same objection's reason for claim 10, line 3, the word "the" in front of the term "level of data stored" should be corrected to -- a -- for clarity.

Also in claim 10, line 4, the word "the" in front of the term "first threshold value" should be corrected to -- a -- for clarity.

In claim 11, line 3, the word "the" in front of the term "communications route" should be corrected to -- a -- for clarity.

Also in claim 11, line 5, the word "the" in front of the term "selection" should be corrected to -- a -- for clarity.

In claim 15, line 7, the word "the" in front of the term "output bandwidth" should be corrected to -- an -- for clarity.

In claim 17, line 2, the word "the" in front of the term "level of data stored" should be corrected to -- a -- for clarity.

Same objection's reason for claim 18, line 2, the word "the" in front of the term "level of data stored" should be corrected to -- a -- for clarity.

Also in claim 18, line 3, the word "the" in front of the term "first threshold value" should be corrected to -- a -- for clarity.

In claim 19, line 2, the word "the" in front of the term "communications route" should be corrected to -- a -- for clarity.

Also in claim 19, line 4, the word "the" in front of the term "selection" should be corrected to -- a -- for clarity.

Appropriate corrections are required.

### **Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 6 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 6 and 12 are rejected under 35 U.S.C. 101 because the claims simply recite “A data carrier containing computer executable code for loading into a computer for the performance of the method of claim 1 (or claim 7), wherein the “data carrier” (could be a ‘signal per se’) is not a computer readable media and not executed by a computer system, such as a microprocessor, for performing the method claim (claim 1 or 7) without setting forth any input/output or steps involved in the process, or which device to process the performance method as claimed, e.g. results in an improper definition under 35 U.S.C. § 101. See for example *MPEP*, Section 2105-1 and [http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf) under Section Non-Statutory Subject Matter of the claimed invention complies with 35 U.S.C. § 101.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In regard to claim 6, line 2, the limitation "computer" is vague and indefinite because it is unclear whether the limitation refers to "the client computer" or "the server computer"; and which is/are "the performance of the method of claim 1", that apply in claim 6.

Similar problem exists in claim 12, line 2, the limitation "computer" is vague and indefinite because it is unclear whether the limitation refers to "the client computer" or "the server computer"; and which is/are "the performance of the method of claim 7", that apply in claim 12.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Note: Although claims 6 and 12 have been rejected under 35 U.S.C. 101 and 112, second paragraph for being indefinite as disclosed above in parts 5 and 7 above of this office action; the following rejection applies to the examiner's best understanding, regarding the "data carrier" as a communication software or process.

8. Claims 1-2, 5-8, 11-12, 15-16 and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Douglas et al.** (U.S.5,680,389; hereinafter refer as '**Douglas**').

- In regard to claims 1, 7 and 15, Douglas discloses, *the method and server computer for transmitting data to a client computer over a communications network* ('data transmission system'), *the data being routed between the server and client computers by a network node* (for example see figure 12; col. 7, lines 23-29; wherein the station 66, e.g. "server computer", send/receives data to/from other stations 68, e.g. "client", through the transmit/receive unit, e.g. "network node"); *the network node having an input to receive data from the server computer, the input being connected to first and second buffer elements said buffer elements being connected to an output channel of predetermined bandwidth* (see col. 5, lines 12-14; where traffic I and buffered traffic II are "first and second buffer elements"), *wherein the first buffer element is preferentially allocated a portion of the output bandwidth and the second buffer element is allocated a remaining portion of the output bandwidth such that packets received in the first buffer element are transmitted in preference to packets received in the second buffer element* (figure 10; buffer elements 22', 22'', 47' and 47'' with input/output channels D1 and D2); *the method comprising means for transmitting data from the server computer to the client computer using the first buffer element of the network node* (see figures 3A-F, 8; col. 3, lines 54-56 where the transmitted data I, e.g. "first buffer element", goes to the switch for transmitting on output links as disclosed in figures 8, 3A); *and means for transmitting data from the server computer to the client computer using the second buffer element of the network node upon receipt by the server computer of a first control signal from the client computer* (see figures 3A-F, 8; col. 4, lines 8-11 where the data II stored in the delay buffer 22, e.g. "second buffer element", is

Art Unit: 2661

transmitted on output link as disclosed in figures 8, 3A; and the “*first control signal*” is the fault signal transmits from the receiving unit or “*client*” to the transmit unit or “*server computer*” if the fault occurs on the link as disclosed in col. 4, lines 3-8).

Douglas fails to explicitly use the words “*first buffer element*” and “*second buffer element*”; however, based on the specification; page 6, lines 24-28; the “*buffer elements*” may be the delay line; where Douglas discloses the direct transmitted data as “*first buffer element*” and the delayed transmitted data as “*second buffer element*”.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the “*first buffer element*” and “*second buffer element*” into the Douglas's direct and delay transmission lines, with the motivation being to improve the integrity for transmission data signal when the fault is detected as disclosed in Douglas: col. 1, lines 8-10.

- Regarding claims 2, 8 and 16, in addition to features in base claims 1, 7 and 15 (see rationales pertaining the rejection of base claims 1, 7 and 15 discussed above), Douglas further discloses, *means for reverting to transmitting data from the server computer to the client computer using the first buffer element of the network node upon receipt by the server computer of a second control signal from the client computer* (for example see col. 4, lines 11-18, 46-49 where the normal operation signal sent from the receive unit to the transmit unit is the “*second control signal*”).



- In regard to claims 5, 11 and 19, in addition to features in base claims 1, 7 and 15 (see rationales pertaining the rejection of base claims 1, 7 and 15 discussed above), Douglas further discloses *wherein the communications route between the server computer and the client computer comprises more than one network node; and the selection of either the first or the second buffer elements in response to a control signal occurs within one or more of the network nodes which comprise the communications route between the server computer and the client computer* (figure 12-13 where any stations between the station which transmits data, e.g. “*server computer*”, and the station which receives data, e.g. “*client*”, are “network nodes” and links 62, 64 are “*communication route*” between stations).

- Regarding claims 6 and 12, Douglas further fails to disclose about “*data carrier*”, e.g. communication software or process. However, it is obvious that, a communication program software or process has to be stored in the transmit/receive unit in order to the control unit can process the steps of the disclosed method.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the “*data carrier*” into the Douglas's transmit/receive units, with the motivation being to provide automatic process to specific designed control program for the system.

### ***Response to Arguments***

9. Applicant's arguments filed on 2/28/2003 with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

10. Claims 3-4, 9-10 and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if amended to overcome the objection(s) set forth in this Office action and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Many references in the art disclose about the method and system for managing information over the network through the quality of services. Most of those references comprise the user's requirement for changing the priority of the service class and wherein the transferring data is stored in different buffers at the network node. But no prior art reference utilizes the upper/lower threshold levels at the client computer data cache for implement the client's request as control signal to the server computer, in request for using the high/low priority buffers of the network nodes for transferring data from the server computer to the client computer.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Civanlar et al.** (U.S.5,995,606), **Riggan et al.** (U.S.6,490,252), **Jones et al.** (U.S.6,307,836), **Kilkki et al.** (U.S.6,041,039), **Koistinen et al.** (U.S.6,154,778) and **Kim et al.** (U.S.6,771,648) are all cited to show devices and methods for improving traffic management and

Art Unit: 2661

flow control in the telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**

Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2661

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan  
March 14, 2006



CHI PHAM  
PROVISORY PATENT EXAMINER  
EBC CENTER 3/16/06